

1. (currently amended) A suspension system for a vehicle wheel set comprising an upper leaf spring and a lower leaf spring each being mounted or mountable on opposed sides of an associated vehicle generally transversely of ~~the~~ an associated vehicle axle, one end of each upper and lower leaf spring comprising connection means for attachment thereof to an associated vehicle chassis, the lower leaf spring being mounted or mountable over the associated vehicle axle with an opposite end thereof forming a further connection means for attachment thereof to the associated vehicle chassis, and auxiliary spring means mounted in series with the upper leaf spring and arranged to provide the associated vehicle with ride characteristics and dynamic deflection geometry substantially the same as those of a conventional leaf spring system in order to mimic the dynamic deflection geometry of a conventional leaf spring system around the normal loading range, wherein ~~said auxiliary spring means comprises means arranged to detect the height across the vehicle and to adjust the auxiliary spring means to compensate for any difference in height~~ said auxiliary spring means is mounted on the upper leaf spring on a part thereof spaced above the lower leaf spring and at a position generally intermediate the vehicle axle and a point of attachment of said opposite end of the lower leaf spring to the associated vehicle chassis.

2. (cancelled)

3. (currently amended) A suspension system for a vehicle wheel set comprising an upper leaf spring and a lower leaf spring each being mounted or mountable on opposed sides of an associated vehicle generally transversely of ~~the~~ an associated vehicle axle, one end of each upper and lower leaf spring comprising connection means for attachment thereof to an associated vehicle chassis, the lower leaf spring being mounted or mountable over the associated vehicle axle with an opposite end thereof forming a further connection means for attachment thereof to the associated vehicle chassis, and auxiliary spring means



mounted in series with the upper leaf spring and arranged to alter a deflection rate of said suspension system in proportion to an imposed load at constant ride height, wherein said ~~auxiliary spring means comprises means arranged to detect the height across the vehicle and to adjust the auxiliary spring means to compensate for any difference in height~~ said auxiliary spring means is mounted on the upper leaf spring on a part thereof spaced above the lower leaf spring and at a position generally intermediate the vehicle axle and a point of attachment of said opposite end of the lower leaf spring to the associated vehicle chassis.

4. (previously presented) A system according to claim 1 or claim 3, wherein said auxiliary spring means comprises an air spring.

5. (previously presented) A system according to claim 1 or claim 3, wherein said auxiliary spring means comprises one of a hydraulic, a hydro-pneumatic, an electro-mechanical and a manual mechanical spring means.

6. (cancelled)

7. (previously presented) A system according to claim 1 or claim 3, wherein the system is arranged to obviate or substantially reduce torsion being applied to the axle and thereby maintain the full axle control of a conventional leaf spring system.

8. (previously presented) A system according to claim 3 which is further arranged to mimic the dynamic deflection geometry of a conventional leaf spring system around the normal loading range.

9. (cancelled)



10. (currently amended) A suspension system for a vehicle wheel set comprising an upper leaf spring and a lower leaf spring mounted or mountable generally transversely of an associated vehicle axle, one end of each upper and lower leaf spring comprising a connection means for attachment thereof to an associated vehicle chassis, the lower leaf spring being mounted or mountable over the associated vehicle axle with an opposite end thereof forming a further connection means for separately attaching it to the associated vehicle chassis, wherein the suspension system includes an auxiliary spring means mounted in series with the upper leaf spring, wherein ~~said auxiliary spring means comprises means arranged to detect the height across the vehicle and to adjust the auxiliary spring means to compensate for any difference in height~~ said auxiliary spring means is mounted on the upper leaf spring on a part thereof spaced above the lower leaf spring and at a position generally intermediate the vehicle axle and a point of attachment of said opposite end of the lower leaf spring to the associated vehicle chassis.

11. (cancelled).

12. (cancelled)

13. (cancelled)

14. (original) A system according to claim 10, wherein said auxiliary spring means comprises an air spring.

15. (original) A system according to claim 10, wherein said auxiliary spring means comprises one of a hydraulic, a hydro-pneumatic, an electro-mechanical and a manual mechanical spring means.



16. (original) A system according to claim 10, wherein the components are arranged to obviate or substantially reduce torsion being applied to the axle and thereby maintain the full axle control of a conventional leaf spring system.

17. (original) A system according to claim 10 which is further arranged to mimic the dynamic deflection geometry of a conventional leaf spring system around the normal loading range.

18. (currently amended) A suspension system for a vehicle wheel set comprising an upper leaf spring and a lower leaf spring mounted or mountable generally transversely of an associated vehicle axle, one end of each upper and lower leaf spring comprising a connection means for attachment thereof to an associated vehicle chassis, the lower leaf spring being mounted or mountable over the associated vehicle axle with an opposite end thereof forming a further connection means for separately attaching it to the associated vehicle chassis, wherein the suspension system includes an auxiliary spring means mounted in series with the upper leaf spring towards an opposite end thereof for separately attaching said opposite end of the upper leaf spring to the associated vehicle chassis, said auxiliary spring means being mounted on the upper leaf spring on a part thereof spaced above the lower leaf spring and at a position generally intermediate the vehicle axle and a point of attachment of said opposite end of the lower leaf spring to the associated vehicle chassis.

19. (cancelled)

20. (new) A system according to claim 1 or claim 3, wherein said auxiliary spring means comprises means arranged to detect the height across the vehicle and to adjust the auxiliary spring means to compensate for any difference in height.